# **Berk-Tek OneReach Cable Assembly**

LC (both ends) Preconnectorized Composite 4 Fiber OS2 with Two 12 AWG Solid Conductors, Plenum



Part Number: BACP04A02D44FFNNPzzzz

The OneReach Cable Assembly (OCA) combines optical fiber and copper conductors in a single assembly that easily attaches with standard LC or MPO and M8 connectors to reach distances up to 3,280 feet for 1000BASE-SX, and up to 6,560 feet for 100BASE-FX.

## **DESCRIPTION**

Speed, simplicity and performance. You find them all in the OCA of the OneReach System. Power and data transmission are supported within a single jacket through the use of Berk-Tek CL3R-PLTC-OF or CL3P-PLTC-OF rated composite copper/fiber power limited tray cable. These cables combine 12 AWG solid conductors with either tight-buffered or loose tube optical fiber cable designs to support 1, 2, or 4-port remote devices.

Building upon the strength of the innovative cable design, assemblies are built to the specific length requirements of each project, and arrive on-site with pre-tested optical fiber connectors and an M8 connector for power on the remote device end, ready to install. The local end of the assembly attaches effortlessly to the local media module or power injector chassis with standard LC connectors and easy to use screw terminals. Single end termination and field termination options are also available.

Rapid and reliable installation is the norm with OneReach, which lets you take PoE to new distances. The solid conductors provide enough power to support PoE to distances well beyond the 100 meters supported through traditional twisted pair cabling.

#### **Benefits**

- Simple, single pull installation
- · Combines control and communication in industrial pathways
- Provides common pathway for fiber backbone and Class 3 power supply
- Can be used in wet or dry locations
- · Designs for indoor, outdoor, and indoor/outdoor environments
- Able to support distances beyond 2,500 feet

Country of Origin: U.S.A.

#### **STANDARDS**

International EN 50173; ISO/IEC 11801

National UL 13

## **CHARACTERISTICS**

Construction characteristics	
Fiber optic type	SM (G657.A1)
Type of cable	Loose tube
Jacket Material	Plenum
Sheath colour	Black
Conductor material	Bare copper
Number of conductors	2
Connector type	LC Duplex
Dimensional characteristics	
Tube diameter	3 mm
Number of optical fibres	4

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SS3006-11-BTv1 - Released December 2020 Page 1 / 2

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Dimensional characteristics	
Cable diameter (Nominal)	0.328 in
Nominal outer diameter	8.3 mm
Nominal cable weight	79 lb/kft
Approximate weight	118 kg/km
Conductor cross-section (AWG)	12
Electrical characteristics	
Max. DC resistance of the conductor at 20°C	1.62 Ohm/kft
DC Resistance (max.)	5.31 Ohm/km
Transmission characteristics	
Optical performance	AB (Single-mode, OS2)
Attenuation, max. 1310 nm (cabled)	0.4 dB/km
Attenuation, max. 1550 nm (cabled)	0.3 dB/km
Mechanical characteristics	
Maximum installation tension	300 lb
Maximum installation tension	1335 N
Max. Load. Long Term (lbs)	90.0 lb
Max. Load. Long Term	400.0 N
Impacts per TIA/EIA FOTP-25	2 at 4.41 N-m
Crush resistance per TIA/EIA FOTP-41	110 N/cm
Cable flexibility per TIA/EIA FOTP-104	100 cycles
Usage characteristics	
Minimum Bending Radius - Install	5.3 in
Minimum Bend Radius - Install	13.4 cm
Minimum Bending Radius - LongTerm	3.5 in
Minimum Bending Radius - LongTerm	8.9 cm
RoHS compliant	Yes
Recommended operating temperature range	-40 75 °C
Ambient installation temperature, range	-30 60 °C
Recommended storage temperature range	-60 85 °C
Field of application	Indoor, Outdoor

### MANUFACTURING RELEASE

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SS3006-11-BTv1 - Released December 2020 Page 2 / 2